

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016770**Date Inspected:** 10-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above.

The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified as hole restoration and 6E/7E-A the following observations were made:

1E-pp9.5-E3-2

The QA Inspector randomly observed the ABF welder identified as Jin Pei Wang performing the SMAW back weld for the above identified weld joint. The QA Inspector noted the base metal and the weld joint were preheated to approximately 150°F and back welding was commenced. The QA Inspector randomly observed the ABF welder to be utilizing 1/8" E7208 low hydrogen electrodes with 130 Amps. The QA Inspector noted the SMAW back weld was completed on the QA Inspectors shift. The QA Inspector randomly observed the SE QC Inspector John Pagliero perform visual testing of the completed weld and mark up areas that would require additional welding. The QA Inspector randomly observed the ABF welder perform the additional welding then begin grinding the weld reinforcement flush with the base material.

6E/7E-A1-A3

Upon the arrival of the QA Inspector, it was observed the ABF welder Bryce Howell was setting up to perform the submerged arc welding (SAW) of the above identified weld segments. The QA Inspector randomly observed the SE QC Inspector Jesse Cayabyab had set the SAW machine to 570 Amps, 32.5 Volts and a travel speed of 370mm/min. The QA Inspector randomly observed the ABF welder begin the SAW root pass in the weld segment A1. The QA Inspector noted a SAW machine malfunction caused the SAW electrode to burn through the steel backing bar between Y=820mm-900mm and deposited an unacceptable weld pass that is to be removed between

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Y=570mm-820mm. The QA Inspector was informed by the ABF Welding Superintendent Dan Ieraci, the SAW machine malfunctioned and must be changed out before the SAW root pass could be continued. The QA Inspector randomly observed the ABF welding personnel removing the SAW Power Wave machine with a replacement and running new welding leads. The QA Inspector noted no additional SAW was performed on the QA Inspectors shift.

The QA Inspector randomly observed the ABF welder identified above begin performing grinding tasks while removing the unacceptable SAW root pass between the locations identified above.

A3-A5

The QA Inspector randomly observed the ABF welding operator Mike Maday begin welding the SAW root pass in the center of A3 and weld to the end of section A5. The QA Inspector randomly observed the SAW parameters and they were 560 Amps, 32 Volts and a travel speed of 370mm/min. The QA Inspector noted the SAW parameters appeared to be in general compliance with ABF-WPS-D1.5-4042B-1. After the root pass was completed between the center of A3-A1, the SE QC Inspectors performed MT of the root pass. The QA Inspector noted no relevant indications were located at the time of the testing. After some minor grinding and blending the QA Inspector randomly observed the ABF welder continue performing the SAW fill passes. The QA Inspector randomly observed the ABF welding operators performing the SAW fill passes for the remainder of the shift.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
